

Fig. 1a

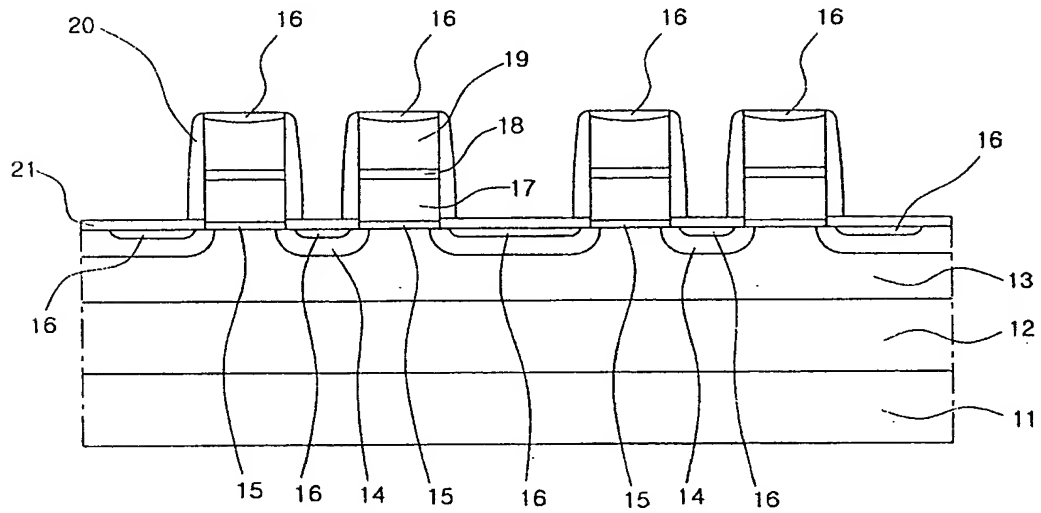


Fig. 1b

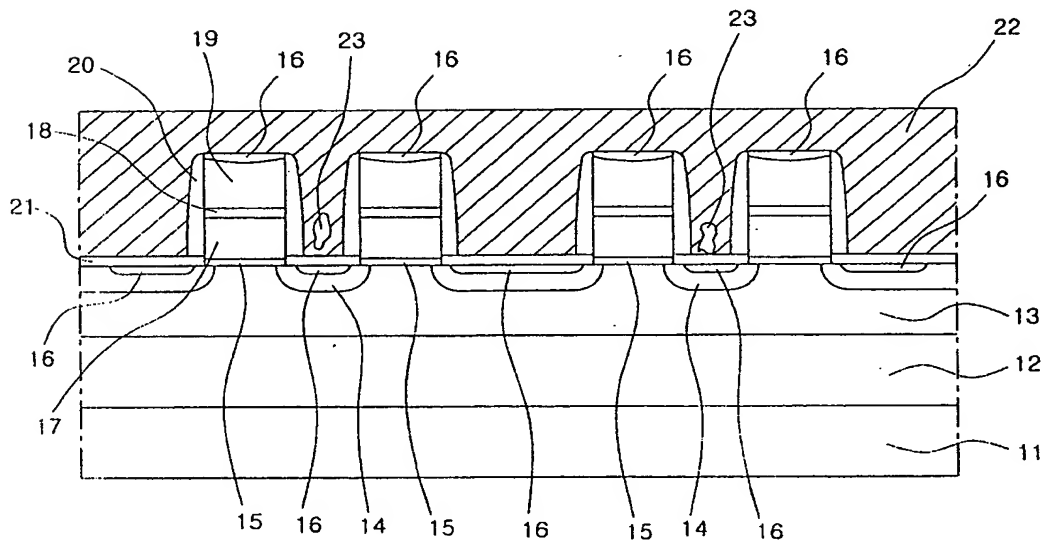


Fig. 2a

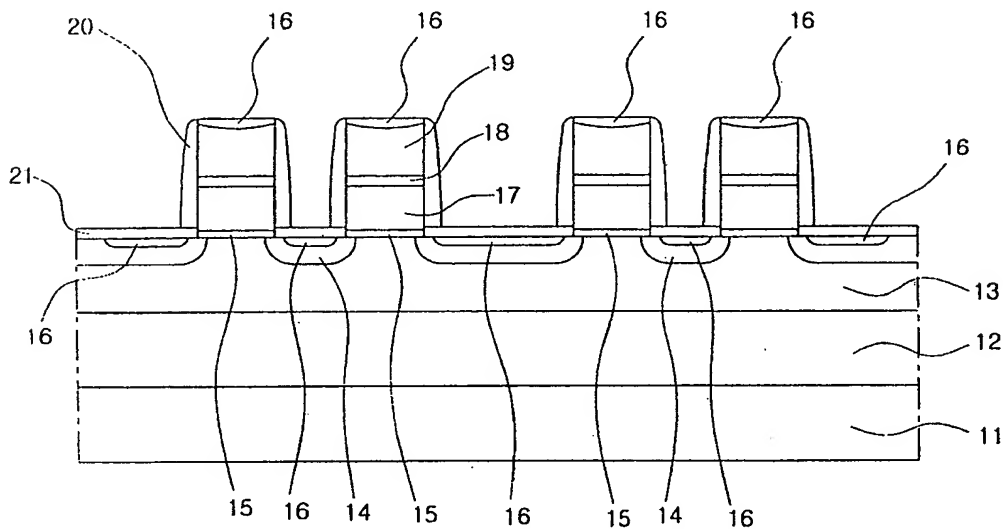
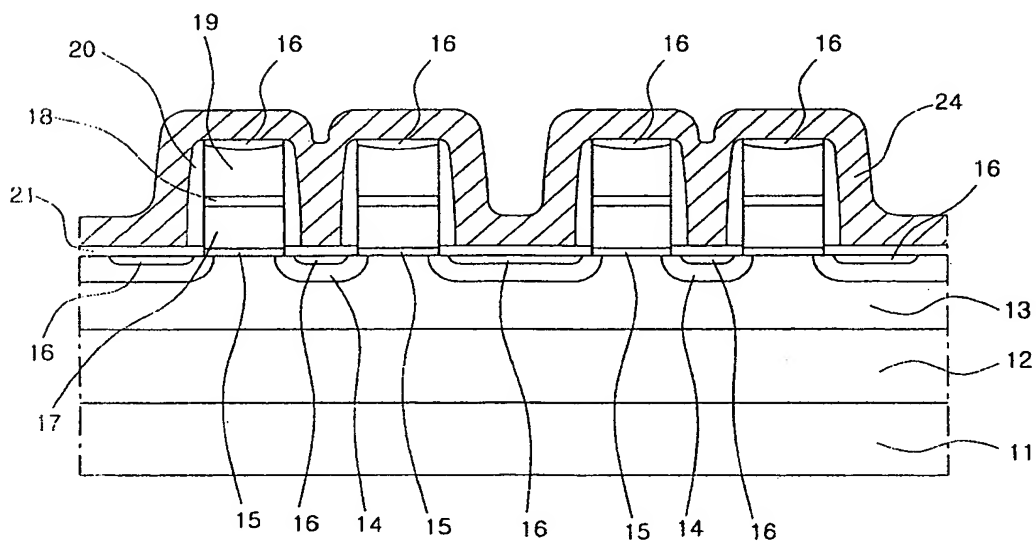


Fig. 2b



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This diagram shows a cross-sectional view of a multi-layered substrate. The substrate consists of three main layers: a top layer (11), a middle layer (12), and a bottom layer (13). A series of raised features (14) are formed on the top layer (11). Each raised feature (14) has a central core (15) and a surrounding layer (16). The top layer (11) is patterned with a series of rectangular openings (17). The middle layer (12) is a uniform layer. The bottom layer (13) is a uniform layer. The raised features (14) are spaced apart, and the openings (17) are aligned with the raised features. The diagram is labeled with various reference numerals: 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 24.

This diagram shows a cross-sectional view of a multi-layered substrate. The substrate consists of three main horizontal layers: a top layer (11), a middle layer (12), and a bottom layer (13). The top layer (11) is patterned with a series of rectangular features (16) separated by gaps (24). These features are connected to a common top surface (19). The middle layer (12) contains a series of corresponding rectangular features (15) that align with the features in the top layer. The bottom layer (13) contains a series of corresponding rectangular features (14) that align with the features in the middle layer. The features in the middle and bottom layers are connected by vertical vias or pillars (16). The gaps in the top layer (24) are filled with a material (20) that is also present in the gaps of the middle and bottom layers. The entire structure is shown in a cross-sectional view, with the top layer (11) having a hatched pattern and the middle and bottom layers (12, 13) having a solid pattern.